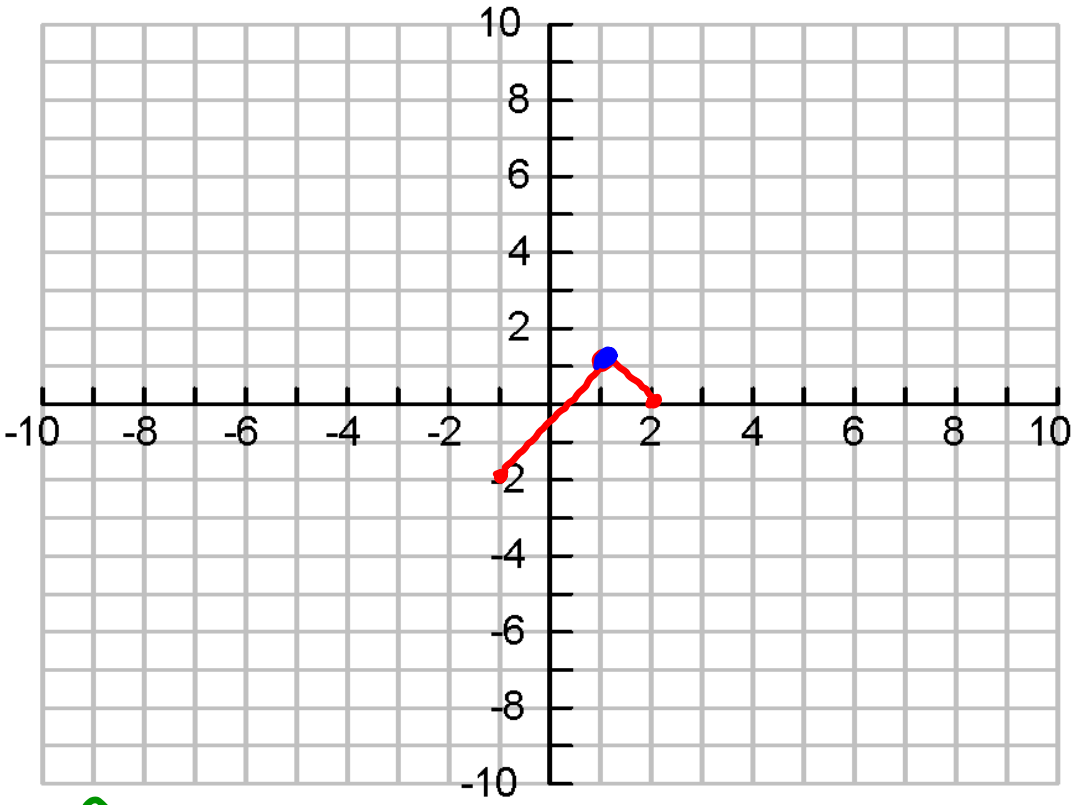


32.

$m = 1$

$b = 0$

$x, x \leq 1$

$f(x) = \begin{cases} x & \\ -x+2 & \end{cases}$

$m = -1$

$b = 2$

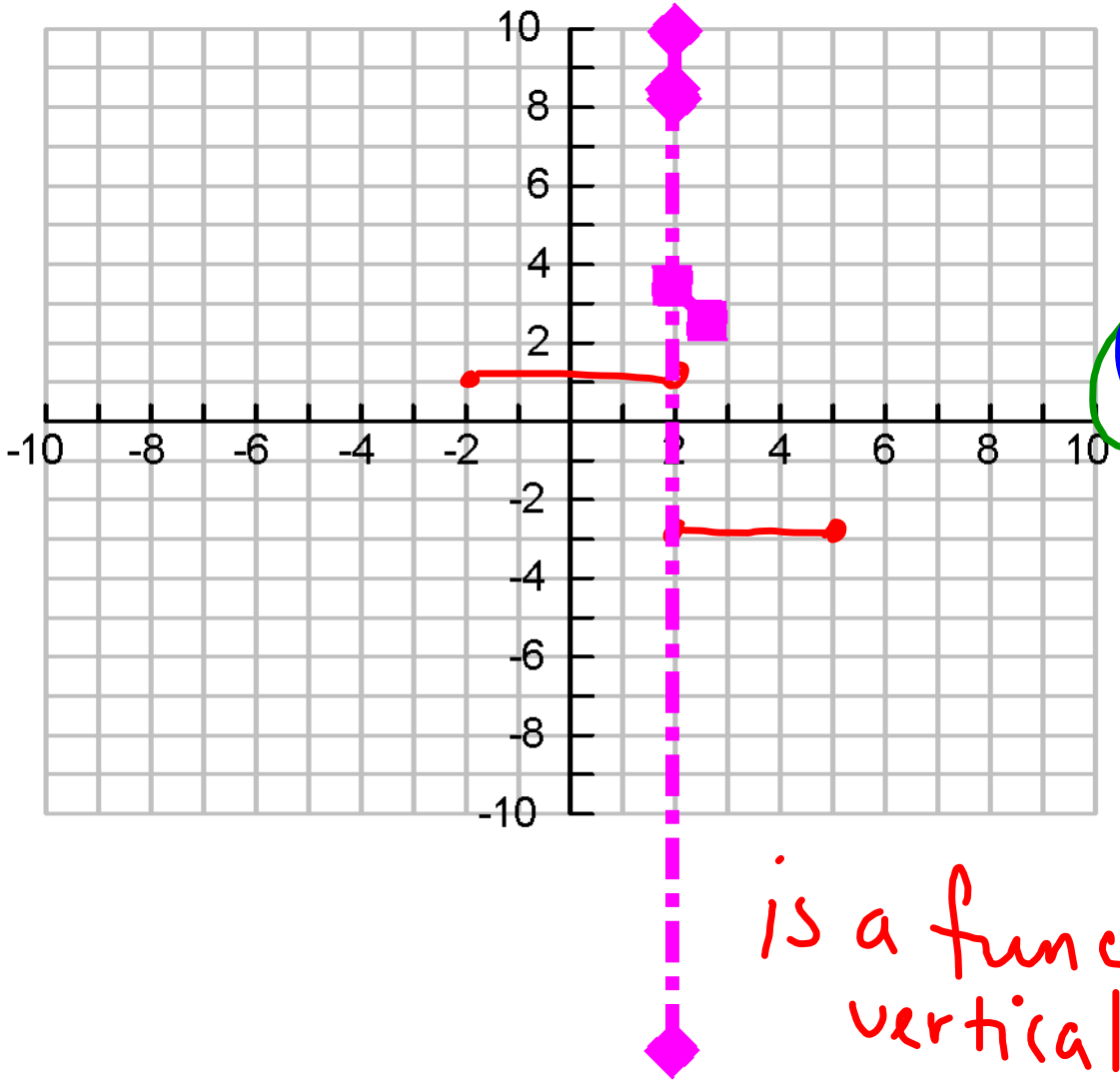
$x, x > 1$

Closed

$f(x) = -x + 2$

$f(1) = -1 + 2 = 1 \quad (1, 1)$

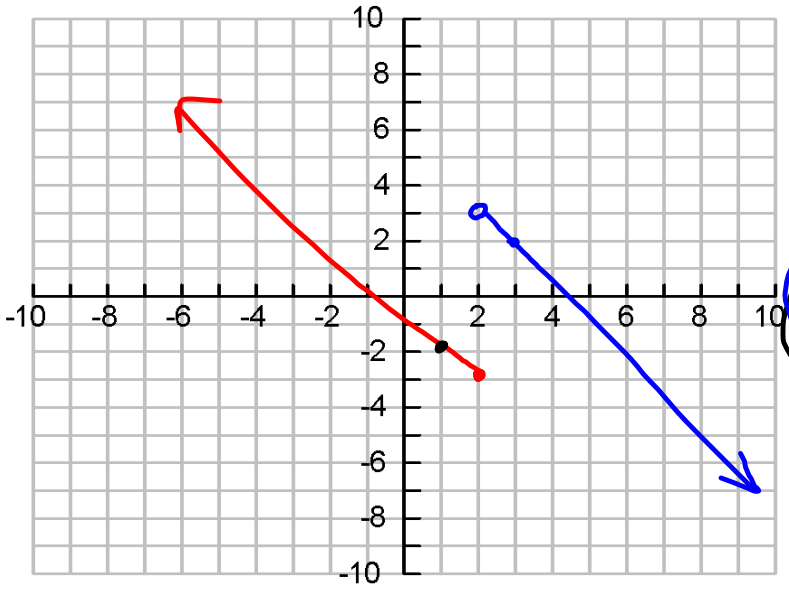
$f(2) = -2 + 2 = 0 \quad (2, 0)$



34. constant function
horizontal line

$$f(x) = \begin{cases} 1 & -2 \le x < 2 \\ -3 & 2 < x \le 5 \end{cases}$$

is a function, passes the vertical line test



linear function

$m = -1$

$b = -1$

$$f(x) = \begin{cases} -1 - x & \text{if } x \le 2 \\ 5 - x & \text{if } x > 2 \end{cases}$$

$f(x) = -1 - x$

$f(2) = -1 - 2 = -3 \quad (2, -3)$

$f(1) = -1 - 1 = -2 \quad (1, -2)$

linear function

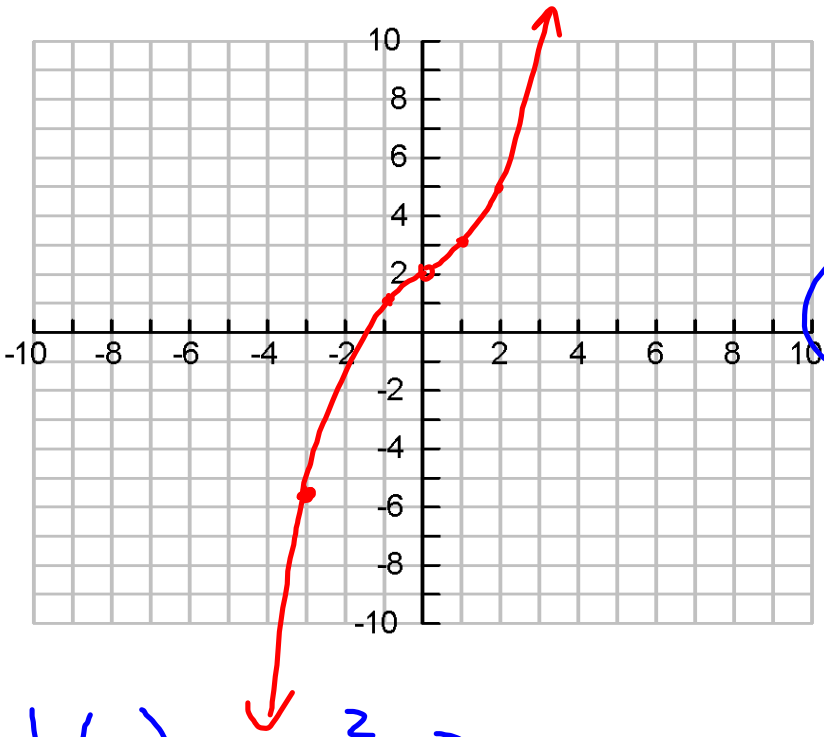
$m = -1$

$b = 5$

$f(x) = 5 - x$

$f(2) = 5 - 2 = 3 \quad (2, 3)$

$f(3) = 5 - 3 = 2 \quad (3, 2)$



38. quadratic function parabola

$h(x) = -x^2 + 2$

$x < 0$

shift up two

$x^2 + 2 \quad x > 0$

reflect over x-axis

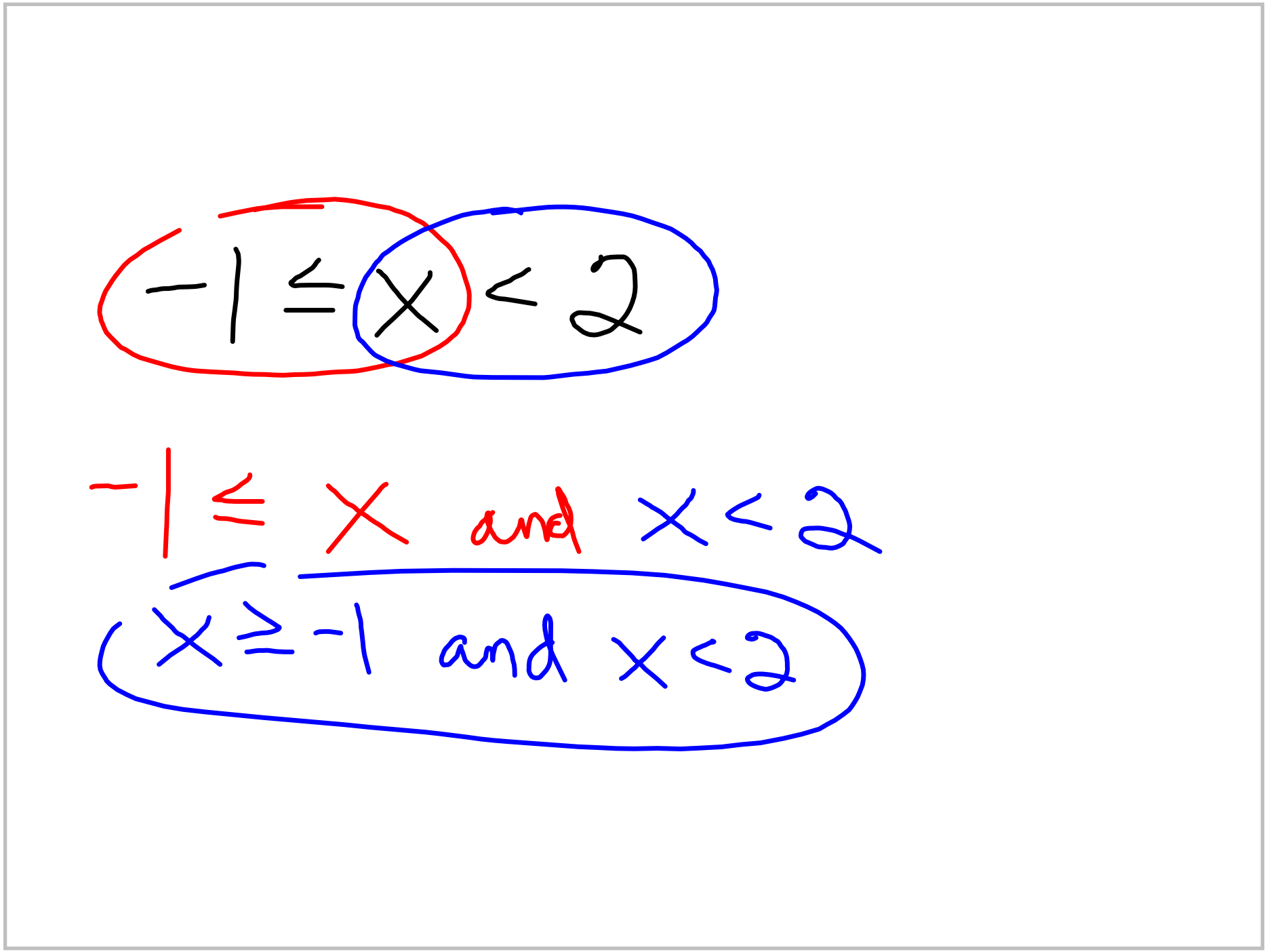
$h(x) = -x^2 + 2$

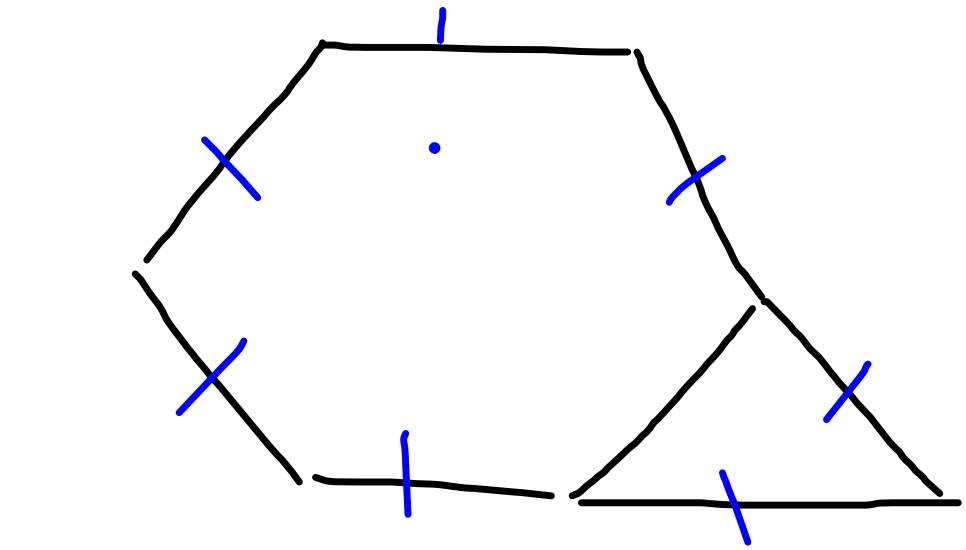
$h(0) = -0 + 2 = 2 \quad (0, 2)$

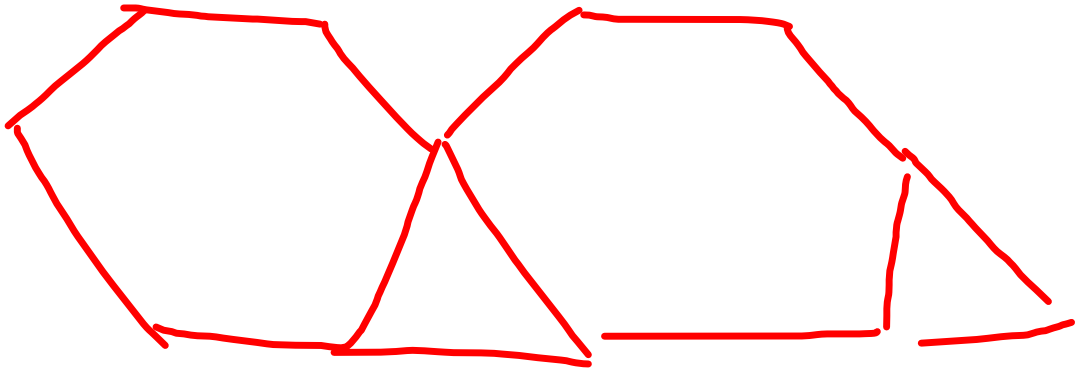
$h(-1) = -(-1)^2 + 2 = 1 \quad (-1, 1)$

$h(x) = x^2 + 2$

$h(1) = 1^2 + 2 = 3 \quad (1, 3)$


$-1 \leq x < 2$
$-1 \leq x$ and $x < 2$
$x \geq -1$ and $x < 2$





Perimeter

1- Hexagon =

2- Hex-Tr

3 Hex-Tri-Hex

4

5

(1)